

FOREWORD

The Society of Chemical Industry, in this its Centenary Year, was proud to host the first International Conference to be jointly organised by the Electrochemistry Group of the Faraday Division of the Royal Society of Chemistry and the S. C. I. Electrochemical Technology Group. In keeping with the aspirations of the co-operating Societies the Organising Committee, comprising equal numbers drawn from each of the Groups, was tasked to construct the meeting in such a way as to be a forum encouraging dialogue between the academic, battery scientist, industrialist, and the student electrochemist.

The proffered programme was limited to 14 papers, although only the 9 written submissions are published here, on the behaviour of separators and electrodes, highlighting their interaction in Electrochemical Energy Storage Systems, these themes being linked by Plenary Lectures given by speakers eminent in their respective fields of endeavour. By so limiting the time devoted to formal presentations the organisers ensured that adequate opportunity existed during the 2 day meeting for unencumbered and informal discussion between delegates.

In introducing the subject of separators Dr Frank Tye took as the theme of his Plenary Lecture the concept of tortuosity, whilst Dr Paul Reutschi from Leclanché S.A. reviewed both present state of art and future advances relating to electrode structure. Professor Milton Allen of the Dept. of Physiology at Nottingham presented a Plenary Lecture on the subject of electrical phenomena in biomembranes, carefully chosen to provoke those electrochemists accustomed to thinking only in terms of battery reactions to consider that which might be learned from the processes evolved by "mother nature" in support of life.

This special edition intends to be representative of the current state of the art across the areas of interest of the Conference, containing a selection of the papers presented at London on 29/30 October, 1981.

Peter J. Fydeler
Chairman, Organising Committee